To: Surveying and Engineering Consultants

From: A. G. Bungard, P.E., County Engineer and Pete Shonka, P.E. City Engineer

Re: City of Savannah and Chatham County Digital Data Submission Standards for Digital Plats

Date: September 23, 2005

The City Engineering Department, Chatham County Engineering Department, and SAMSOG have developed the digital plat submittal format and data standards contained in this design directive. The standards were developed to standardize all digital plat submissions between the City of Savannah and Chatham County and to streamline the integration of this digital information into Geographic Information Systems datasets.

As of October 1, 2005, each plat(s) or subdivision map(s) delivered to the City of Savannah or to Chatham County, required by ordinance or policy, will be delivered digitally, in addition to standard hard copy documents on mylar.

Digital files

- A completed digital drawing in DWG or DXF, AutoCAD version 13 format or later. This digital format drawing shall be an exact replica of any required and/or included data represented on the submitted hard copy drawing/document.
- An Adobe compatible PDF file of the drawing that will plot to scale must be submitted.
- This data must be provided on standard transfer media or by electronic transfer (3½-inch floppy disk or CD-ROM or E-mail attachment). The submitted transfer media shall be labeled with the project name (subdivision name, or accepted job name, etc.), filing date, registered land surveyor or professional engineer's name and any other established project identifier.

Data Standards

- All drawings will be constructed in the Georgia State Plane Coordinate System in feet using North American Datum 1983 (NAD83). These coordinates must be established within sub-meter accuracy.
- All data shall be completed using standard graphics that require no "third-party" software.

- Digital linework must be topologically clean. Lines must be geometrically continuous and boundaries must be geometrically closed with no "undershoots" or "dangles" where boundaries intersect. The digital linework must not include "sliver polygons" (gaps or overlaps between properties). All traverse features will be "snapped" closed at intersections. Essentially, the digital version of the map must be of a high precision so that it can be easily converted to a GIS format.
- All features in the required layers should be closed polygons (polylines) or annotation (text) with the exception of benchmarks which are point features. Any features or text that are not organized into the specified layers may be placed into the miscellaneous feature layer and miscellaneous annotation layer.

An example of a digital plat submission has been created and is available for download from the City of Savannah and Chatham County Engineering Department web sites (see Figure A). The example is an AutoCAD drawing file that is a representation of a fictitious plat. The file contains examples of all the layers and feature types that are expected from these data standards.

Layer names, feature types, and descriptions:

- 1. BLDG (Polygon) All existing building/structure footprint areas.
- 2. BM (Point) All benchmark and geodetic monument locations.
- 3. BSL* (Polygon) All building setback areas (see Figure B).
- 4. BUFFER* (Polygon) All exclusion areas as required by ordinance(s) (see Figure C).
- 5. COMAREA* (Polygon) All common areas inside the subdivision (see Figure D).
- 6. EAS* (Polygon) All existing and proposed easement areas located either inside or adjacent to the subdivision (see Figure E).
- 7. ESBWANNO (Annotation) All text describing Easements, Setbacks, Buffers, and Wetlands.
- 8. MISCANNO (Annotation) Any additional (optional) plat text not included in the other required annotation layers defined in these standards.

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- 9. PARCEL (Polygon) All parcel boundary areas within the subdivision (see Figure F).
- 10. PARCELANNO (Annotation) All new PINs, lot numbers and street addresses for subdivision lots (individual or tabular).
- 11. ROW* (Polygon) All existing and new road and drainage right-of-way areas, located either inside or adjacent to the subdivision (see Figure G).
- 12. ROWANNO (Annotation) All existing and new street names and right-of-way widths.
- 13. SUBDIV* (Polygon) Subdivision boundary areas (see Figure H).
- 14. SURVEYANNO (Annotation) All survey data (bearings, distances, curve data, tie lines, etc.).
- 15. WETLAND* (Polygon) All existing delineated wetland areas either inside or adjacent to the subdivision (see Figure I).

*Note: In AutoCAD, island areas such as the one created by the example right-of-way in Figure G would be created by (3) or more polylines. Multiple polylines do not translate to (1) polygon in ArcGIS. In order to create a correct polygon of the right-of-way it is necessary to make an AutoCAD block of all the associated right-of-way polylines.

Any deviation from this standards will have to have prior approval from the County/City Engineer or his/her appointee.